corrected. The antipathy which some of us have for "statistics" is explained, and we are shown what may be done with the right facts, rightly classified and compared. In fact the chapter on "The Simple Ingredients of the Statistical Remedy" gives us so luminous an exposition of the purpose and method of statistics that any prejudice we may have against statistics must disappear.

The chapter on "School Efficiency" gives us a brilliant exposition of what we are losing in all our schools by the lack of a proper method of record, and use of the record as a means of correcting errors and directing our growth in right lines. "Any educational policy that must forever be supported by belief, not fact, is either too expensive a luxury for a democracy to indulge in or too insignificant to worry about. Any policy that the best theory justifies, facts will also justify, and figures describe, classify, count, compare, and summarize." An inspiring story is told of what has already been accomplished in New York City, for the school children and for the schools, by the Committee on Physical Welfare of School Children, a handful of earnest people, "who have desired to know certain countable, measurable facts." It is an object-lesson for all the country. For, "It is true of our American schools, that an adequate system of bookkeeping and records would disclose waste in construction of buildings, in supplies, in service, in children's time, in opportunity, vastly exceeding the expenditure necessary for bringing to light such waste."

Dr. Allen carries this keen specific analysis through the discussion of charitable work, the prevention of crime, religious work, and government, giving in many cases an exact form of inquiry and record, showing how the form of record may be made to give the maximum of information with the minimum of effort in entry. He then outlines a Municipal Bureau of Statistics, showing how such an institution, if endowed and independent, and properly manned with experts, could be a power of the greatest significance in organizing the municipal record in all the lines he has discussed, and in others; and how such record may be presented to all the people in such a way as to turn on a veritable search-light in all lines of municipal activity, so pointing out the weak places, giving a chance to eliminate wastes, correct errors, and finally to arrive at efficiency.

It is good to know that his appeal has borne fruit. That an endowment is already subscribed for such a bureau in New York City, and that Dr. Allen is chosen as its first secretary. We may look with confidence to this bureau for some of the most stimulating work in the matter of the management of the school budget and of school organization and management. A copy of this book ought to find its way into the hands of every school board in the land.

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August 1, 1907

Physiography. By ROLLIN D. SALISBURY. New York: Henry Holt & Co., 1907. Pp. xx+770. Maps and illustrations. $3.50.

Teachers of physiography will welcome this new book, not only on account of the large amount of fresh material and the fine illustrations that it contains, but also because it represents the accumulated experience and the method of a scientist whose skill as a teacher is well known and widely appreciated.

The perspective adopted in regard to the treatment of the topics presented furnishes the teacher and the student alike with a standard expression of the material of physiography as taught by American scholars today. While the book is largely the result of the author's research, it also represents in large measure the various lines of investigation to which references are made within its pages; and it therefore places the reader in touch, if not always in harmony, with the best that has been written, and may be said to voice the latest and the best thought upon the topics which it treats.

The book goes beyond the elementary treatment found in books of the secondary school. Though the reader is carried forward to a consideration of the unsettled questions that must necessarily arise in any adequate discussion of matters upon which the final word has not yet been said, and though the ripest opinions of the most advanced students are considered in this discussion, still the treatment is in no sense of the word theoretical. In the perspective adopted by the author some teachers may feel that small space has been given to certain topics appropriate to high school, such as rocks and minerals, and to the study of plant and animal geography, but it must be remembered that in colleges, where the author designs the book to be used, special courses in these related topics are given in the associated departments. And, further, space enough could not be given in a text on physiography for a discussion adequate to the needs of the teacher or the advanced student of these lines that are only indirectly represented in the subject. In fact a strong point in the book is this, that, with the exception of a few references to physiographic effects on human life scattered through its pages, it presents physiography as a science associating causes and effects clearly and forcibly, thus avoiding the mistake made by many authors who try to exalt physiographic control at the expense of a science deeply interesting for its own sake.

The author holds persistently to that idea of physiography which regards the origin of land forms as its chief problem; or as is expressed in the introduction, the scope of the subject includes those facts that pertain to the plane of contact of the air and water with the land, and of air with water. The results of the activity of physical forces through the three media, air, water, and land, by the very nature of things can be expressed only in terms of the land, since air is constantly changing its form and the water assumes a relief temporarily, only, while both air and water leave more or less permanent forms in the surface of the land. But any study of the origin of land forms involves the study of both the air and the water, since the former becomes the medium through which natural forces operate, while the latter is the greatest agent in producing the effects. Though the major part of the text is given to land forms, still 273 pages remain for the treatment of the atmosphere, the ocean, and the earth's solar relations. The treatment is essentially dynamic and the movement in the direction of the explanation of the origin of the land forms of the earth. The reader is led to see these forms in the process of becoming what they are, and to anticipate the time when they shall give way to other forms. The surface of the earth becomes a stage where physical forces play their part, now in one rôle, now in another, until the land above the sea is reduced to base level or rejuvenated to pass again through a similar sequence of events.

The first chapter of the book introduces the reader to the chief relief forms of the crust of the earth and to the material out of which they are formed. This

general survey places the problem of the land forms well before the student and prepares him for the consideration in the following eight chapters of the agents that have shaped them. The discussion runs on smoothly in the explanation of the work of the atmosphere, of ground water, running water, snow and ice, of waves and currents in the construction of shore forms, of vulcanism, and the effects of crustal movement, or diastrophism. These chapters are followed by a very excellent generalization and summary of the origin and distribution of land forms.

The part played by the atmosphere in the evolution of relief gains for it a treatment comparable in detail to that presented by special texts on meterology. Here, again, the sequence is dynamic. The energy received from the sun is followed through a series of transformations in the chapters on atmospheric pressure, the movement of air currents, and the transportation of water vapor to its final precipitation upon the earth. The various elements of climate and the zones of climate receive due attention. In these chapters the composition of the atmosphere, the air in its life relations, the distribution of temperatures over the earth, and the philosophy of air movement are treated in an interesting and original manner. The chapter on the storms of the United States is especially detailed and illustrated by a complete series of isothermal charts and weather maps. Following the chapters on the atmosphere six chapters, covering fifty pages, are given to the discussion of the principal facts of oceanography.

The text contains more than seven hundred illustrations, forty-three of which are sections of topographic maps, and of the others more than three hundred are beautiful halftones. The placing of pictures with respect to text is admirable. One can turn to any of the illustrations and find adjacent to it the statement that explains it, so that illustration and text seem to blend in conveying the idea to the reader. The halftones are not merely inserted, as in some books, but bear a vital relation to the text.

At the end of each chapter one finds a well-selected list of topographic maps, with suggestions as to their use, in relation to the text, and a list of classified and paged references for supplementary reading. These references, even without the text, would be a most valuable aid to the advanced student or teacher, since they represent the cream of the exercises and assignments accumulated by long experience in the classroom. The style of the author, in the exposition of the science, is delightfully clear, and the concise statement of the most abstruse parts of the work will be a source of satisfaction to every student who appreciates exactness and definiteness. Though the book is written for college students the style is so clear and the treatment so straightforward that the average high-school student will read it as easily as the more elementary texts.

I have used the book with classes in the normal school and find it well adapted to the work of introducing the student to the more general field of geography. The students tell me that they find the text clear and interesting. They certainly get a good grip on the subject, as shown by their recitations.

No teacher or advanced student can afford to be without this comprehensive statement of the principles and matter of physiography. No better book could be had, also, for reference work in classes in the high school.

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